

6th to the 9th, when near the Cape Verde and Canary Islands. During the next few days, low pressure near Iceland, in connection with the HIGH, caused whole gales along part of the far-northern route, near latitude 55°, longitude 20°.

Elsewhere in this REVIEW appears an account of three tropical disturbances; all developed in the Gulf or western Caribbean, and only the first of them affected the main Atlantic Ocean. The first disturbance crossed southern Florida on the 15th and then traveled northeastward rapidly, passing northwest of Bermuda, and becoming, by the 16th, part of a north-south Low system. On the 17th the Low was well consolidated, with its center near the Strait of Belle Isle, whence it traveled northward to Greenland, the pressure at Godthaab on the 18th falling to 28.98 inches.

During the final week of June there were a few isolated cases of intense local storms. On the 24th vessels and airplanes south of the Dominican Republic reported squally conditions, but no cyclonic development was detected. The chief of the Meteorological Service at Santo Domingo reports that the squalls were accompanied by heavy sea swells that caused the death of 12 fishermen in small boats. A few lives were also lost at San Pedro de Macoris as a result of heavy seas. The British freighter *Baron Ogilvy* went aground at the mouth of the Nizao River and was a total loss.

At an early hour of the 29th the American steamer *Mariana*, when about 160 miles east of Hatteras, met a vigorous thunderstorm with westerly squalls estimated at

force 10. Later that day or on the 30th, three vessels noted westerly gales over waters to northeastward of the *Mariana's* location, one of the three encountering a whole gale.

Fog.—Fog was unusually prevalent over many northern portions of the North Atlantic. In the vicinity of the British Isles and to southwestward half way to the Azores there were many days with fog, especially about the 10th and the 20th, and during the final few days of June. However, almost no fog was met in the eastern and central portions of the ocean anywhere to southward of the forty-fifth parallel, while along the chief route to the English Channel practically no fog was encountered between the twenty-fifth and fortieth meridians.

In the Grand Banks region there was about the normal amount of fog; but to southwestward, as far as Cape Cod, fog was very prevalent, the two 5°-squares 40 to 45° N., 60 to 70° W., each having records of 20 days' occurrence. To the southwestward of Cape Cod there was considerable fog, but the first half of the month included practically all of it, while as usual in June there was scarcely a single report of fog near or to southward of Cape Hatteras.

Four disasters due to fog were reported as occurring during the 6th to 9th, fortunately without loss of life. One steamer grounded near Cape Race, Newfoundland, and a schooner on an island in the Gulf of St. Lawrence, each becoming a total loss. During the evening of the 9th two steamships collided off Sea Girt, N. J., one being greatly damaged but being towed to harbor. The fourth accident was a less serious collision in the lower St. Lawrence River.

OCEAN GALES AND STORMS, JUNE 1936

Vessel	Voyage		Position at time of lowest barometer		Gale began June	Time of lowest barometer June	Gale ended June	Lowest barometer	Direction of wind when gale began	Direction and force of wind at time of lowest barometer	Direction of wind when gale ended	Direction and highest force of wind	Shifts of wind near time of lowest barometer
	From—	To—	Latitude	Longitude									
NORTH ATLANTIC OCEAN													
West Quechee, Am. S. S.	Galveston	Liverpool	42 40 N.	42 35 W.	2	4p, 2	2	29.61	ENE	NE, 10	NE	NE, 10	E-NE.
Cavina, Br. S. S.	Kingston	Avonmouth	42 42 N.	42 59 W.	2	8p, 2	2	29.58	NE	NNE, 8	NE	NNE, 8	NE-NNE-NE.
Lekhaven, Du. S. S.	Galveston	Bremen	41 30 N.	44 40 W.	2	2a, 3	3	29.75	NNE	NNW, 8	NE	NNW, 9	Steady.
Lustrous, Br. S. S.	Port Arthur	Amsterdam	41 00 N.	42 10 W.	2	8p, 3	3	29.61	NNW	N, 6	NE	NNW, 8	NW-NE.
Kambove, Belg. S. S.	Buenos Aires	Antwerp	8 28 N.	28 20 W.	6		9		NE	NE, 7	NE	NE, 7	None.
Boskoop, Du. S. S.	Cristobal	Liverpool	39 35 N.	42 40 W.	4	1p, 4	4	29.69	NW	NE, —	ENE	N, 8	NNW-NE.
Prode, Dan. S. S.	New York	Oslo	54 22 N.	33 20 W.	9	Mdt, 9	10	29.19	SE	W, —	NW	WNW, 10	SW-W.
McKeesport, Am. S. S.	Dundee	Boston	55 10 N.	23 15 W.	10	4p, 10	11	29.36	SSE	WSW, 9	W	WNW, 10	SSW-WNW.
West Conas, Am. S. S.	Glasgow	New Orleans	54 06 N.	11 50 W.	14	8p, 14	15	29.68	WSW	W, —	W	W, 8	SSW-W.
Mayari, Pan. S. S.	Boston	Banes, Cuba	25 46 N.	73 08 W.	15	2a, 16	16	29.57	S	W, 8	N	W, 8	SSW-W-N.
Duquesne, Am. S. S.	Rotterdam	New Orleans	29 21 N.	70 24 W.	15	6a, 16	16	29.46	SSE	N, 7	N	S, 8	S-Var.-N.
Sundance, Am. S. S.	Terneuzen	Newport News	38 57 N.	56 58 W.	16		18	29.75	SSE	NNW, 7	NNE	SSE, 9	SSE-NNW-NNE.
New York, Ger. S. S.	Cherbourg	New York	42 00 N.	54 48 W.	17	5p, 17	18	29.69	SSE	S, 8	N	SSE, 8	S-N.
Themisto, Du. S. S.	Montreal	Antwerp	52 20 N.	51 30 W.	17	6p, 17	17	29.51	S	S, 8	NNW	S, 9	S-WNW.
Excheater, Am. S. S.	Lisbon	New York	40 20 N.	17 13 W.	19	8p, 19	20	29.48	SW	W, 9	NNW	W, 9	WSW-NW.
Cayo Mambi, Am. S. S.	Puerto Mexico	New Orleans	23 58 N.	91 34 W.	19	9p, 19	20	29.52	NNW	Var., 2	E	E, 8	NW-Var.-E.
Venezuela, Du. S. S.	Barbados	Plymouth	45 10 N.	19 40 W.	19	6a, 20	20	29.57	NW	N, 6	NNE	NNW, 8	NNW-NNE.
Excheater, Am. S. S.	Lisbon	New York	41 59 N.	38 57 W.	24	4p, 24	25	29.98	NW	NW, 4	NNW	NNW, 8	Steady.
Mariana, Am. S. S.	Johos, P. R.	do	35 26 N.	72 10 W.	29		29		SW	W, —	W	W, 10	SW-W.
Laurent Meeus, Belg. M. S.	Amsterdam	Houston	38 56 N.	57 57 W.	28	8a, 29	30	29.62	SW	SW, 9	SW	SW, 9	SW-W.
Excheater, Am. S. S.	Lisbon	New York	41 16 N.	57 28 W.	28	10a, 29	30	29.58	WSW	SW, 8	WNW	SW, 10	SW-W.
New Brunswick, Br. S. S.	Dakar	Boston	37 50 N.	63 10 W.	29	Mdt, 30	30	29.73	SW	SW, 8	Var	SW, 8	SW-Var.
NORTH PACIFIC OCEAN													
Golden Sun, Am. S. S.	San Francisco	Yokohama	38 07 N.	178 00 E.	1 31	3p, 1 31	1	29.47	S	SW, 9	N	NW, 10	S-WSW.
Golden Dragon, Am. S. S.	do	do	37 06 N.	154 07 E.	1	4p, 1	2	28.92	SE	SW, 10	NW	W, 11	S-W.
Bronxville, Nor. M. S.	Santo Nino	Los Angeles	37 08 N.	161 00 E.	1	2a, 2	3	29.27	SSE	WSW, —	NW	SW, 11	SW-WSW-W.
Golden Sun, Am. S. S.	San Francisco	Yokohama	37 48 N.	171 18 E.	2	11a, 2	3	29.53	SSE	SSE, 10	WNW	SSE, 10	SSE-SW.
Golden Hind, Am. S. S.	Dairen	San Francisco	31 35 N.	171 40 E.	2	2p, 2	2	29.61	S	S, 8	W	S, 8	S-W.
Nordhval, Dan. M. S.	Vancouver, B. C.	Balboa	12 39 N.	92 38 W.	9	8a, 9	9	29.18	ENE	E, 9	SW	SSE, 10	ENE-S.
Constance Chandler, Am. S. S.	Los Angeles	do	13 15 N.	93 55 W.	9	4p, 9	10	29.53	NW	NW, 5	S	SW, 10	NW-SW.
Ensley City, Am. S. S.	Balboa	Los Angeles	14 00 N.	94 30 W.	12	—, 12	12	29.67	N	N, 7	NW	N, 8	N-NW.
Amyer, Br. S. S.	Los Angeles	Kobe	30 03 N.	162 32 E.	11	6a, 13	14	29.58	SSW	NNE, 6	NE	NE, 8	S-Var-NE.
Empress of Canada, Br. S. S.	Honolulu	Victoria, B. C.	41 20 N.	136 58 W.	16	4a, 16	16	29.65	W	W, 7	W	W, 8	W, 8.
Steel Ranger, Am. S. S.	do	Balboa	13 58 N.	102 17 W.	22	11a, 22	23	29.49	NNW	SW, 8	S	SW, 8	NW-SW.
Fernlane, Nor. M. S.	Los Angeles	Yokohama	42 36 N.	175 47 E.	24	Mdt., 24	25	29.65	S	SSW, 7	W	W, 8	S-W.
Fres. Jackson, Am. S. S.	Seattle	do	51 44 N.	171 40 W.	25	2p, 25	26	29.53	SSW	SW, 8	SW	SW, 8	SW, 8.
Fernlane, Nor. M. S.	Los Angeles	do	39 03 N.	152 03 E.	29	9p, 29	30	29.65	S	WSW, 9	SW	WSW, 9	WSW-SW.

1 May.

1 Position approximate.

1 Barometer uncorrected.